CLAIMS

Claims 1-20 (canceled)

Claim 21 (previously presented): A structural system of an automotive vehicle, the system comprising:

a structure of the automotive vehicle, the structure defining a cavity;

a reinforcement member located within the cavity of the structure, the reinforcement member including:

i. a carrier member formed as a shell and having an inner surface and an outer surface; and

ii. a reinforcement material disposed upon the outer surface of the carrier member; and

at least one locating member attached to the reinforcement member, the at least one locating member assisting in locating the reinforcement member with the cavity of the structure;

wherein the at least one locating member is attached to the carrier member with a mechanical fastener or an adhesive; and

wherein at least 80 % of the carrier has a section thickness of no greater than 1 centimeter.

Claim 22 (previously presented): A structural system as in claim 21 wherein a sealant material is disposed upon the at least one locating member

Claim 23 (previously presented): A structural system as in claim 21 wherein the at least one locating member includes a panel that overlays a surface of the reinforcement member.

Claim 24 (previously presented): A structural system as in claim 21 wherein the at least one locating member includes a spring mechanism.

Claim 25 (previously presented): A structural system as in claim 21 wherein the at least one locating member is integrally formed with the carrier member.

Claim 26 (previously presented): A structural system as in claim 21 wherein the carrier member is formed of a molding compound selected from sheet molding compound, bulk molding compound and thick molding compound.

Claim 27 (previously presented): A structural system as in claim 21 wherein the at least one locating member includes at least three locating members.

Claim 28 (canceled)

Claim 29 (previously presented): A structural system as in claim 21 wherein the outer surface of the carrier member includes a concave side surface and a convex side surface.

Claim 30 (previously presented): A structural system as in claim 21 wherein the at least one locating member functions as a baffle and physically substantially separates portions of the cavity from each other.

Claim 31 (previously presented): A structural system as in claim 21 wherein the reinforcement material is configured to foam upon exposure to heat in an e-coat or paint oven.

Claim 32 (previously presented): A structural system of an automotive vehicle, the system comprising:

a structure of the automotive vehicle, the structure defining a cavity;

a reinforcement member located within the cavity of the structure, the reinforcement member including:

i. a carrier member formed as a shell and having an inner surface and an outer surface; and

ii. a reinforcement material disposed upon the outer surface of the carrier member; and

at least one locating member attached to the reinforcement member, the at least one locating member assisting in locating the reinforcement member with the cavity of the structure;

wherein the at least one locating member includes a panel that overlays a surface of the reinforcement member; and

wherein at least 80 % of the carrier has a section thickness of no greater than 1 centimeter.

Claim 33 (previously presented): A structural system as in claim 32 wherein the structure is a pillar of the automotive vehicle and wherein the at least one locating member includes a first locating member and a second locating member and the second locating member includes a spring mechanism and the second locating member flexes while the first locating member contacts walls of the structure for locating the reinforcement member in the cavity.

Claim 34 (previously presented): A structural system as in claim 32 wherein a sealant material is disposed upon the at least one locating member.

Claim 35 (previously presented): A structural system as in claim 32 wherein the at least one locating member is integrally formed with the carrier member.

Claim 36 (previously presented): A structural system as in claim 32 wherein the carrier member is formed of a molding compound selected from sheet molding compound, bulk molding compound and thick molding compound.

Claim 37 (currently amended)

Claim 38 (previously presented): A structural system as in claim 34 wherein the at least one locating member functions as a baffle and physically substantially separates portions of the cavity from each other.

Claim 39 (previously presented): A structural system of an automotive vehicle, the system comprising:

a structure of the automotive vehicle, the structure defining a cavity;

a reinforcement member located within the cavity of the structure, the reinforcement member including:

i. a carrier member having an outer surface; and

ii. a reinforcement material disposed upon the outer surface of the carrier member; and

at least one baffle member attached to the reinforcement member, the at least one baffle member being shaped as a panel and including a sealant material disposed thereon wherein the sealant material is expanded to seal the cavity against passage of materials therethrough and the baffle member physically separates portions of the cavity from each other and wherein the sealant material is different from the reinforcement material and wherein the baffle member overlays at least one surface of the carrier member.

Claim 40 (previously presented): A reinforced structural system as in claim 39 wherein the at least one baffle member is integrally formed with the carrier member.

Claim 41 (previously presented): A structural system as in claim 39 wherein the carrier member is formed of a molding compound selected from sheet molding compound, bulk molding compound and thick molding compound.

Claim 42 (previously presented): A structural system as in claim 39 wherein the sealant material is configured to foam upon exposure to heat in an e-coat or paint oven.

Claim 43 (previously presented): A reinforced structural system as in claim 39 wherein at least about 80 % of the carrier has a section thickness of no greater than 1 centimeter.

Claim 44 (previously presented): A reinforced structural system as in claim 39 wherein the at least one locating member is at least partially formed of a microcellular plastic material.

Claim 45 (canceled)

Claim 46 (previously presented): A reinforced structural system as in claim 39 wherein the baffle member contacts the walls of the structure for assisting in locating the reinforcement member within the cavity of the structure.

Claim 47 (previously presented): A reinforced structural system as in claim 39 wherein the sealant material of the baffle member overlays substantially the entirety of a panel member of the baffle member.

Claim 48 (previously presented): A reinforced structural system as in claim 39 wherein the baffle member is a first locating member and the system additionally includes a second locating member that includes a spring mechanism, which flexes as the first locating member contacts walls of the structure for locating the reinforcement in the cavity.

Claim 49 (previously presented): A reinforced structural system as in claim 39 wherein the carrier member is formed as a shell and has an inner surface defining a cavity extending into a substantial portion of the carrier.

Claim 50 (new): A structural system of an automotive vehicle, the system comprising:

a structure of the automotive vehicle, the structure defining a cavity;

a reinforcement member located within the cavity of the structure, the reinforcement member including:

i. a carrier member formed as a shell and having an inner surface and an outer surface; and

ii. a reinforcement material disposed upon the outer surface of the carrier member; and

at least one locating member attached to the reinforcement member, the at least one locating member assisting in locating the reinforcement member with the cavity of the structure;

wherein the at least one locating member includes a panel that overlays a surface of the reinforcement member;

wherein the structure is a pillar of the automotive vehicle and wherein the at least one locating member includes a first locating member and a second locating member and the second locating member includes a spring mechanism and the second locating member flexes while the first locating member contacts walls of the structure for locating the reinforcement member in the cavity.